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AUTHOR Wilkins, William E.; Jones, J. Reid
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ABSTRACT

A study was conducted on the performance of black students from a historically black university (HBU) as well as examinations used for teacher certification in Mississippi. Of specific concern for this paper was the success of black students in successfully completing the NTE/PRAXIS Examinations. Its scope began with the NTE examinations and covered the transition to the PRAXIS series. The data are discussed in terms of changes in preparation programs, cultural issues, and the implications for recruitment and retention of minority students in teacher education programs. Data analyses indicate that, over the period from 1993 to 1998, little difference was noted in the success rates of black candidates on the teacher certification examinations. The findings were consistent whether results of the NTE or the PRAXIS were used. The introduction of learning strategy instruction, including critical thinking units and practice on the Learning Plus System, seemed to have marginal effects on student success. When data are couched in terms of a broader set of educational achievement/predictor examinations, clear indications are observed for the alternative assessment of minority candidates. (Contains 27 tables and 12 references.) (SLD)

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PRAXIS SCORES AT AN HBU: A FIVE YEAR TREND ANALYSIS

William E. Wilkins, Ph.D.
Mississippi Valley State University

and

J. Reid Jones, Ph.D.
Delta State University

ABSTRACT:

Historically, member of specified minority groups have done differentially less well on standardized tests used for admission to colleges and universities and entrance into professional careers. Of specific concern for this paper is the success of black students in successfully completing the NTE/PRAXIS Examinations. The results in this paper are based on a five year analysis of trends covering the transition form the NTE to the PRAXIS as a requirement for certification in Mississippi. The data is discuss in terms of changes in preparation programs, cultural issues and implications for recruitment and retention of minority students in teacher education programs. Data analysis indicate that over a five year period (1993 to 1998) little difference in success rate was noted. This finding was consistent whether results of the NTE or the PRAXIS was utilized. Introduction of learning strategies, including critical thinking units and practice on the Learning Plus System, seemed to have marginal effects on student success. When data are couched in terms of a broader set of educational achievement/predictor examinations, clear indications for alternative assessment of minority candidates becomes apparent .

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INTRODUCTION:

One of the enduring problems in educational measurement and subsequent problems in education policy decision making is the consistent finding of minority scores on standardized tests. While all test makers have become sensitive to this issue and a variety of attempts to diminish test and cultural bias have emerged, the problems continue to endure. Clearly, there are broad and multi-faceted issues involved. The concern of this research is to explore some of the variables involved in meeting criteria scores on the NTE/PRAXIS SERIES by Black teacher education majors. As public schools become more and more ethnically diverse, the number of minority teachers in the public schools continues to decrease. Numerous writers have discussed this problem and many have generated concern over the lack or potential lack of minority role models for minority students. It is hoped that this paper may provide some insights to develop new models of teacher education admission and assessment.

The data used in the five year analysis came from students entering or trying to enter the teacher education program at an Historical Black University in Mississippi. Teacher certification in Mississippi require meeting minimum criterion scores on the National Teacher Examination or more recently, on the Praxis Series. This paper evolved from attempts to identify deficiencies in educational programming and to develop appropriate teaching/learning strategies to ensure that students met criterion scores. It was also anticipated that an evaluation of strategy effectiveness would also become available. The University requires students to meet State criterion scores before they can be formally admitted to teacher education programs and before they can continue on into Directed Teaching.

SOME HISTORICAL PERSPECTIVE:

Summary data available from the National Center for Educational Statistics present a consistent pattern of black Americans scoring less well on a variety of achievement measures when compared to their white counterparts. While the gap between white high school seniors and their black peers has narrowed marginally, large differences still remain on scores in reading, writing, math, and science. Data from the same source indicates that white students are more persistent and more apt to complete bachelor degree programs and black students are less likely to complete their undergraduate degree programs in four years.

Traditional standardized measures such as ACT and SAT continue to report significant differences between black and white examinees on both verbal and math scores. Trend scores on the SAT indicate a modest gain in math scores for all students over the past ten

years but the difference between black and white scores continues to hover around the 100 point range. For 1998 scores, the average verbal score for white was 526 while the average score for black test takers was 434; the average math score for whites was 528 while that for blacks was 426.

Scores on GRE tests over the past years consistently note the same disparity. Results for 1996-97 revealed: *

	Verbal	Quantitative	Analytical
Mean Scores			
White	495	540	564
Black	391	416	423

results reported in: Sex, Race, Ethnicity, and Performance on the GRE General Test 1998-99. A Technical Report, ETS.

A review of the same report of previous years indicates a similar set of results. It is also interesting to note that those examinees who indicated that they intended to enter graduate work in education have the lowest scores in Verbal, Quantitative, and Analytical areas when compared to groups intending to enter any other graduate study area. Again, these findings are consistent across years. One last piece of perspective data indicates that black examinees who state an intent to enter graduate study in education have the lowest scores in all three areas when compared to any other ethnic group. **

	Verbal	Quantitative	Analytical
Mean Score			
American Indian	456	479	506
Asian/Pacific Is.	487	598	557
Black American	391	416	423
Mexican American	435	475	483
Puerto Rican	410	471	459
White	495	540	564

**Sex, Race, Ethnicity and Performance on the GRE General Test 1996-97. ETS.

As with other variables this finding is again consistent over at least a five year period.

In summary, students who choose to enter education tend to have lower scores on traditional standardized measures of success then those students who choose to enter other fields of study. Black students have lower scores on these measures when compared to their white peers regardless of chosen field of study. Black students who choose to enter education tend to have lower scores than their any of their peer ethnic groups.

THE NATIONAL TEACHER EXAMINATION //PRAXIS SERIES

The most widely used assessment of potential teaching effectiveness is the National Teacher Examination (NTE) developed by Educational Testing Service. Within the past three years, ETS has offered a revised version the NTE which is titled the Praxis Series. At present, different states require prospective teachers to reach a criterion score on one or the other of these examinations. Mississippi traditional used the NTE but moved to the Praxis Series in 1996 with mandates that the NTE scores would no longer be accepted for licensure after July or August 1997. However, the Area Examinations of the NTE are still utilized to obtain licensure. The present data covers the time period of NTE and transition to only acceptance of the Praxis Series.

DeMauro (1989), in a report for ETS notes: "It is difficult to estimate the percentage of examinees who pass National Teacher Evaluation (NTE) tests because many users of the tests require the examinees pass different combinations of tests or use different passing scores for each of these tests". Results do indicate, however, that there are variations in ethnic differences in passing rates. DeMauro goes on to note that these variations depend on the both the combinations and cutoff scores but nonetheless clearly indicate blacks being less likely to pass the tests when compared to their white counterparts.

At about the same time Fields (1988) reported that over 38,000 perspective minority teachers in 19 states failed to meet criterion scores on the NTE. These findings raised, for her considerable concern as to the limiting of teacher diversity at a time of increasing student diversity.

In 1991, Gillis (1991) again raised concerned for the limiting effects of teacher certification requirements. Analyzing the results of competency testing in Texas, Gillis states "Statistics indicate only 5 percent of American teachers will be minorities in 2000."

While these researchers, among others have focused on this topic, no literature was found which analyzed sub-score patterns to provide a platform for the development of specific revisions in either assessment techniques or specific teaching/learning strategies or instructional practice which may begin to alter this consistent set of findings. The

present study provides such an analysis and it is hoped the results will suggest clear hypotheses. In order to assist in this process, it is necessary to carefully clarify the distinct areas of assessment. It must be kept in mind that the often repeated purpose of the teacher assessments is to determine if teachers possess the necessary precursor knowledge base to become a teacher. That is, no claim is made as to the effectiveness of teaching but rather to a predetermined set of necessary conditions to be a successful teacher.

The original set of examinations used in this research are entitled The National Teacher Examination or NTE. The examination is composed of three primary sections with subtests within the sections. The first Section, Core Battery, is composed of three parts: General Knowledge ,Communication Skills and Professional Knowledge. As would be expected from the titles, the General Knowledge Test contains a broad range of specific achievement items covering the content of a "liberal arts" program. The Communication Skills Test contains a Listening Skills part, an English Usage Part, a Reading Part, and a Writing Skills part. The Professional Knowledge Test contains items which are designed to assess a student knowledge of basic pedagogical best practices tests and measurement skills and classroom management skills. The ETS Test at a Glance details the content covered and the weight assigned to each part.

When these examinations are used for certification purposes, Mississippi, like other States, established "cut-off" scores which were used to determine "competence". Over time each State established different, variable cut-off scores and Teacher Preparation Programs differentially utilized the scores for entrance in to various levels of program preparation. Mississippi mandated the following criterion scores:

CORE BATTERY

Communication Skills	651
General Knowledge	646
Professional Knowledge	649

These cut-off scores were based on the 25th percentile of the 1983 national norms.

The second aspect of the NTE was known as the Specialty Area Examination. This part contained twenty exams each unique to a content area. These areas range from Elementary Education to Audiology and German . The teacher education program in this study was primarily an elementary education program. While very small secondary education programs exist, none are of sufficient size to produce a meaningful pool of data. Therefore, while secondary majors may at times be included in the general data analysis, only the Elementary Education Specialty Area Examination data will be used in content area analysis. Mississippi has mandated a cut-off score of 540 for this area.

PRAXIS SERIES:

As noted above, in 1996 a new series of teacher evaluations was marketed by ETS. Mississippi began to use this series in 1996 along with the Core Battery Examinations. In July, 1997 Mississippi no longer accepted Core Battery Scores for certification determination. It should be noted that many other States continue to use the Core Battery as the certification benchmark.

The Praxis Series is composed of three sets of examinations. Logically these are called Praxis I, Praxis II, and Praxis III. ETS defines the purpose of each of the following as:

Praxis I Academic Skills Assessment

Three sub-test, Reading, Mathematics, and English Usage comprise this battery. There is also a Computer Based version of these sub-tests.

Praxis II Subject Assessment

This part of the Praxis Series is composed of the Core Battery, Subject Assessment/Specialty Area Tests and Principles of Teaching and Learning.

Praxis III Classroom Performance Assessments

This part is a direct observation of teaching in progress using trained observers and a set of nationally validated criterion skills.

Mississippi, after 1997 uses the following set of Praxis Examinations for certification guidelines.

Praxis I Academic Skills Assessment: This exam replaces the Communication Skills and General Knowledge criteria. Either form, paper-pencil or computer based is acceptable. The following cut-off scores (SAFE TO PRACTICE SCORE) have be established.

PRAXIS EXAM	PAPER/PENCIL SCORE (PPST Scores)	COMPUTER BASED SCORE (CBT Scores)
Reading	170	316
Writing	172	318
Mathematics	169	314

Praxis II

The Professional Knowledge part of the Core Battery has been replaced by the Principles of Teaching and Learning (PLT). Three levels of the PLT. K-6, 5-9, and 7-12 have been developed. The PLT differs significantly from the Professional Knowledge Exam. The Professional Knowledge Exam is a two hour multiple choice format whereas the PLT poses representative classroom scenarios and students are required to answer a few multiple choice items but the majority of the exam requires students to write assessments of the practices illustrated and to, at times, offer an evaluation of and alternative to the illustrated practice. Mississippi has established a "Safe to Practice" score of 152 for all three levels. A computer based format is not available.

The above noted Subject Assessment/Specialty Area Tests now fall within the title of Praxis II. Very little in the way of format change has occurred. Again, only the Elementary Area Examination provided a sufficient subject pool to be included in the data analysis.

Mississippi does not use the Praxis III battery as a part of their certification process It is important to note that in the past Mississippi also required an assessment similar to the Praxis III which was completed during the teacher's first year of teaching. This variable may will provide a major role in our discussion section. It is also important to note that Mississippi now requires all of its teachers to have graduated from an NCATE accredited program.

Descriptions of the PPST, and the PLT from the Test at a Glance Series denote the content areas assessed by each exam.

RESULTS:

Educational Testing Service provides data based on median scores. Data summaries for the Core Battery, that is, Communication Skills, General Knowledge, and Professional Knowledge are presented below.

TABLE I

Communication Skills
National Median Scores Vs Local Median Scores

YEAR	NATIONAL SCORES	LOCAL SCORES
1993-94	Md 662 (N = 81,012)	Md 641 (N = 195)
1994-95	Md 662 (N = 78,632)	Md 642 (N = 186)
1995-96	Md 662 (N = 66,512)	Md 643 (N = 170)
1996-97	Md 661 (N = 52,485)	Md 645 (N = 96)

In general, local scores are approximately 20 points lower than national scores. Results indicate that national score medians are approximately 10 points higher than Mississippi's Safe to Practice Cut-off and local medians are approximately 10 points below the Cut-off score.

TABLE II

Communication Skills Median Scores
Local Scores by Gender

YEAR	MALES	FEMALES
1993-94	Md 643 (N = 44)	Md 640 (N = 151)
1994-95	Md 642 (N = 46)	Md 643 (N = 140)
1995-96	Md 645 (N = 43)	Md 644 (N = 124)
1996-97	Md 644 (N = 32)	Md 654 (N = 64)

No clear gender differences emerge over the four year period.

TABLE III

Communication Skills Median Scores
Local Scores by Race

YEAR	AFRO-AMERICAN	OTHER RACE
1993-94	MD 642 (N = 168)	MD 637 (N = 12)
1994-95	MD 643 (N = 166)	MD 638 (N = 11)
1995-96	MD 645 (N = 141)	MD 640 (N = 12)
1996-97	MD 645 (N = 83)	MD ----- (N = 13)

Data revealed a consistent pattern with modest increases in scores being reported for both groups. The Other Race scores tend to be lower than the Afro-American scores. It should also be noted that the N decrease over time as Mississippi moved toward the Praxis Series. It should also be noted that the Other Race N is small and was so small that in 1996-97 EST reported no median scores. However, the pattern of scores does indicate the need to explore general educational and cultural variables which over-ride race differences in scores. Another important variable is the consistency of the N before 1996. Many of the examines are "repeat takers" who are unsuccessful at meeting criterion scores.

TABLE IV
Communication Skill Median Scores
Local Scores by Education Level

YEAR	TOTAL	SOPHOMORE	JUNIOR	SENIOR	DEGREE	DEGREE +
93-94	641	645	638	636	638	647
N	195	28	55	59	28	12
94-95	642	642	642	641	643	648
N	186	22	38	56	43	13
95-96	644	646	642	646	643	645
N	170	17	45	31	45	23
96-97	645	-----	643	641	646	648
N	96		21	24	15	18

These data present inclusive and complex findings. Basically there is no consistent effect on educational level on passing rates. The data are confounded by "repeat takers" and therefore the effects of curricular restructuring and preparation courses are unclear. There also seems to be a need to more carefully consider the content validity of the Exam as it interacts with minority students.

TABLE V

Communication Skill Median Scores
By Academic Education Major

YEAR	EDUC.	ELEM ED.	MATH/SCI	SOC. SCI	ELEM ED (GRAD)
93-94	642 (N 195)	640 (N 35)	----------	642 (N 12)	638 (N 23)
94-95	642 (N 186)	650 (N 24)	648 (N 23)	641 (N 22)	638 (N 26)
95-96	644 (N 170)	645 (N 29)	645 (N 11)	641 (N 25)	641 (N 22)
96-97	645 (N 96)	638 (N 21)	652 (N 10)	636 (N 11)	635 (N 13)

Again, when the data are analyzed with reference to academic major, there again is no consistent differences. While some variation between and within groups exists from year to year, there is no clear pattern of differences over the four years.

TABLE VI

General Knowledge
National Median Scores Vs Local Median Scores

YEAR	NATIONAL SCORES	LOCAL SCORES
1993-94	Md 658 (N = 91,425)	Md 636 (N = 196)
1994-95	Md 657 (N = 89,705)	Md 639 (N = 205)
1995-96	Md 657 (N = 78,296)	Md 640 (N = 169)
1996-97	Md 657 (N = 64,901)	Md 640 (N = 93)

Like the Communication Skill Exam, the Local Scores are consistently lower than the National Scores and consistently below the passing cut-off score of 646. It is important to note the moderate, yet consistent increase in Local Scores over the four year period. In 1993-94 the Local Median was 10 points below the passing cut-off score; by 1997 the median score was a consistent 6 points below the passing score.

TABLE VII

General Knowledge Median Scores
Local Scores by Gender

YEAR	MALES	FEMALES
1993-94	MD 639 (N 42)	MD 636 (N 154)
1994-95	MD 642 (N 45)	MD 639 (N 160)
1995-96	MD 646 (N 43)	MD 639 (N 124)
1996-97	MD 650 (N 26)	MD 637 (N 67)

The trend of a consistent difference between gender scores in favor of males is present. By 1995-96 the Male Median Score was at or above the Mississippi cut-off. These differences may be a function of academic major in that the vast majority of females are elementary education majors whereas the majority of males are secondary majors. Further analysis of this finding is warranted.

TABLE VIII

General Knowledge Median Scores
Local Scores by Race

YEAR	AFRO-AMERICAN	OTHER RACE
1993-94	MD 637 (N 168)	MD 633 (N 13)
1994-95	MD 640 (N 185)	MD 635 (N 12)
1995-96	MD 643 (N 142)	MD 636 (N 11)
1996-97	MD 640 (N 80)	MD --- (N 13)

These data are fairly consistent with the Communication Skills findings. Over a three year period median scores for the black sample is modestly, yet consistently higher than the other race sample. Sample size warrants caution but there is also a pattern of increase in black scores over a three year period. This finding adds to the need to focus on local environmental variables.

TABLE IX

General Knowledge Median Scores
Local Scores by Education Level

YEAR	TOTAL	SOPHOMORE	JUNIOR	SENIOR	DEGREE +
93-94	635	638	635	632	636	
N	196	31	56	51	33	11
94-95	639	641	640	637	639	643
N	205	27	48	62	43	14
95-96	640		643	644	639	
N	169	17	48	29	43	25
96-97	640	------	637	640	639	634
N	93		20		19	13

Median scores for 1993-95 indicate an inverse trend as academic year increases through the senior year. The 1995-96 median scores show a consistent, small, increase as academic level increases. All 1995-96 median scores were higher than post graduate scores and by the senior year the median score is only 2 points below the minimum cut-off score. Some modest progress is being made.

TABLE X

General Knowledge Median Scores
By Academic Education Major

YEAR	DEUCE.	ELM ED.	MATH/SCI	SOC.SCI	ELEM ED GRAD
93-94	638 (N 34)	636 (N 124)	----------	639 (N 14)	632 (N 24)
94-95	645 (N 28)	638 (N 120)	641 (N 21)	640 (N 26)	638 (N 29)
95-96	642 (N 28)	642 (N 88)	645 (N 14)	640 (N 22)	637 (N 27)
96-97	640 (N 17)	638 (N 47)	647 (N 10)	640 (N 11)	637 (N 13)

The only consistent pattern that emerges from these data is the consistently higher median scores for the Math/Science Majors. Other results indicate that from year to year and from group to group variation is present.

TABLE XI

Professional Knowledge
National Median Scores Vs Local Median Scores

YEAR	NATIONAL SCORES	LOCAL SCORES
1993-94	Md 662 (N = 85,638)	Md 640 (N = 89)
1994-95	Md 662 (N = 83,990)	Md 644 (N = 101)
1995-96	Md 662 (N = 79,958)	Md 644 (N = 95)
1996-97	Md 663 (N = 68,069)	Md 646 (N = 82)

Consistent with previous findings, the Local Median Scores are approximately 20 points lower than the National Median Scores. It is important to note that Local Medians are fairly close to the Mississippi cut-off score of 649.

TABLE XII

Professional Knowledge Median Scores
Local Scores by Gender

YEAR	MALES	FEMALES
1993-94	Md 639 (N = 26)	Md 640 (N = 63)
1994-95	Md 642 (N = 30)	Md 646 (N = 71)
1995-96	Md 645 (N = 35)	Md 643 (N = 60)
1996-97	Md 647 (N = 22)	Md 645 (N = 60)

Results show that while both groups made modest yet consistent increases, no clear pattern of gender differences emerged.

TABLE XIII

Profession Knowledge Median Scores
Local Scores by Education Level

YEAR	TOTAL	JUNIOR	SENIOR	DEGREE	DEGREE +
93-94	640 (N 89)	646 (N 13)	639 (N 26)	634 (N 26)	640 (N 14)
94-95	644 (N 101)	650 (N 14)	645 (N 27)	642 (N 29)	642 (N 15)
95-96	644 (N 95)	650 (N 20)	643 (N 22)	644 (N 27)	643 (N 16)
96-97	646 (N 82)	642 (N 21)	651 (N 22)	641 (N 14)	642 (N 12)

A clear pattern was emerging for Junior Level scores to be higher than all others until 1996-97 when the Senior Level students markedly out-scored all other groups. It is noteworthy that median scores for juniors in 94-96 and seniors 96-97 are above the minimum cut-off scores for successful completion.

TABLE XIV

Profession Knowledge Median Scores
By Academic Education Major

YEAR	EDUC.	ELEM ED	MATH/SCI	SOC SCI
93-94	640 (N 17)	643 (N 56)	----------	----------
94-95	646 (N 24)	644 (N 47)	636 (N 11)	640 (N 12)
95-96	646 (N 20)	645 (N 48)	----------	640 (N 14)
96-97	643 (N 17)	649 (N 47)	----------	----------

Data indicate that scores for Educ. and Elem Ed Majors consistently rise over the four year period with the 96-97 Elem. Ed Median Score equaling the Mississippi cut-off of 649. Data from other majors is to scarce to make any meaningful statement.

PRAXIS SERIES

After 1997 Mississippi no longer accepted NTE scores for certification. In 1996 students began taking the Praxis Series. A description was presented earlier in this paper. Data analysis will now focus on the Praxis scores and then a comparison between success rates on the two measures will be appraised.

RESULTS FOR PRAXIS SERIES:

A major source of data again came from the Educational Testing Service and as before, ETS presents most of their data in terms of median scores. Data summaries for the PPST, CBT scores for Reading, Writing, Mathematics are presented below. The PLT for Grade Level K-6 data will also be presented.

TABLE XV

PPST Reading Test
and
CBT Reading Test
National Median Scores Vs Local Median Scores

YEAR	PPST NATIONAL	PPST LOCAL	CBT NATIONAL	CBT LOCAL
96-97	Md 179 (N 42,198)	Md 167 (N 91)	**Not yet available**	
97-98	Md 178 (N 41,436)	Md 168 (N 150)	Md 329 (N 27,743)	Md 321 (N 53)

Preliminary data indicate that Local Median Scores are about 10 points different from the National Medians. This represents a 10 point reduction in difference scores when compared to similar data from the Core Battery data.

TABLE XVI

Praxis I Reading Median Scores (PPST and CBT)
Local Median Scores By Gender

YEAR	PPST MALE	PPST FEMALE	CBT MALE	CBT FEMALE
96-97	172 (N 16)	166 (N 75)	----------	----------
97-98	169 (N 28)	167 (N 122)	324 (N 11)	321 (N 42)

Samples are small, but no clear pattern of gender differences is apparent.

TABLE XVII

Praxis I Reading Median Scores (PPST and CBT)
Local Median Scores By Grade Level

YEAR	SOPH	JUNIOR	SENIOR	DEGREE	DEGREE +
96-97					
PPST	171 (N 11)	167 (N 15)	169 (N 24)	168 (N 18)	164 (N 19)
97-98					
PPST	168 (N 17)	169 (N 26)	166 (N 34)	168 (N 39)	165 (N 25)
CBT		323 (N 11)		321 (N 16)	

Again, no clear group or year differences are apparent.

TABLE XVIII

Praxis I Reading Median Scores (PPST and CBT)
Local Median Scores By Academic Major

YEAR	EDUC	ELEM ED	MATH/SCI	SOC SCI	GEDUC	GSOC SCI
PPST						
96-97	171 (15)	166 (51)	----------	---------	166 (10)	----------
97-98						
PPST	167 (22)	167 (76)	170 (14)	172 (20)	164 (24)	166 (10)
CBT	321 (19)	321 (19)	--------	----------	323 (11)	----------

Math/Sci and Soc Sci scores appear to be slightly higher but this may be a function of the cross over from the Core Battery. Clearly, the graduate categories continue to do less well as they did on the Core Battery. It is likely that this group is an on-going set of "retakers".

TABLE XIX

Praxis I Writing Median Scores (PPST and CBT)

YEAR	PPST NATIONAL	PPST LOCAL	CBT NATIONAL	CBT LOCAL
96-97	Md 175 (N 43,497)	170 (N 89)	----------	
97-98	Md 175 (N 42,386)	170 (N 156)	Md 323 (N 27,952)	Md 318 (N 54)

While Local Scores tend to be lower that National Scores, the discrepancy appears less that that on the Communication Skill portion of the Core Battery.

TABLE XX

Praxis I Writing Median Scores (PPST and CBT)
Local Median Scores by Gender

YEAR	PPST MALE	PPST FEMALE	CBT MALE	CBT FEMALE
96-97	169 (N 16)	170 (N 73)	----------	
97-98	168 (N 35)	170 (N 121)	318 (N 13)	318 (N 41)

No gender difference appear.

TABLE XXI

Praxis I Writing Median Scores (PPST and CBT)
Local Scores by Grade Level

YEAR	SOPH	JUNIOR	SENIOR	DEGREE	DEGREE +
96-97					
PPST	173 (N 10)	170 (N 16)	170 (N22)	169 (N 17)	168 (N 20)
97-98					
PPST	171 (N 17)	171 (N 25)	169 (N 38)	170 (N 44)	168 (N 23)
CBT		319 (N 10)		316 (N 19)	317 (N 10)

No clear pattern emerges other than if the assumption that Degree and Degree + groups are primarily composed of people unable to successfully complete the Core Battery, then the data suggests that they are no more successful on the Praxis Series.

TABLE XXII

Praxis I Writing Median Scores (PPST and CBT)
Local Median Scores by Academic Major

YEAR	EDUC	ELEM ED	MATH/SCI	SOC SCI
96-97				
PPST	170 (N 89)	171 (N 50)		
97-98				
PPST	171 (N 26)	169 (N 74)	171 (N 14)	170 (N 23)
CBT	319 (N 22)	318 (N 15)		

Again, with minimal data, no trends are obvious.

TABLE XXIII

Praxis I Mathematics Median Scores (PPST and CBT)
National Median Scores Vs Local Median Scores

YEAR	PPST NATIONAL	PPST LOCAL	CBT NATIONAL	CBT LOCAL
96-97	Md 178 (N 43,752)	Md 165 (N 92)	----------	
97-98	Md 178 (N 43,592)	Md 165 (N 164)	Md 324 (N 29,774)	Md 315 (N 63)

Data indicate that local mathematics scores medians show a larger difference from national scores that the other parts of the Praxis I Exams.

TABLE XXIV

Praxis I Mathematics Median Scores (PPST and CBT)
Local Median Scores by Gender

YEAR	PPST MALE	PPST FEMALE	CBT MALE	CBT FEMALE
96-97	164 (N 76)	165 (N 92)	----------	
97-98	167 (N 31)	165 (N 164)	319 (N 14)	314 (N 49)

Slight differences in favor of males are present but the sample size warrants caution.

TABLE XXV

Praxis I Mathematics Median Scores (PPST and CBT)
Local Median Scores by Grade Level

YEAR	SOPH	JUNIOR	SENIOR	DEGREE	DEGREE +
96-97					
PPST	165 (N 92)	168 (N 12)	163 (N 15)	166 (N 23)	162 (N 20)
97-98					
PPST	166 (N 18)	166 (N 28)	165 (N 41)	165 (N 42)	165 (N 25)
CBT		316 (N 14)	314 (N 12)	314 (N 18)	316 (N 12)

Other than to note that Seniors tend to score less well than other undergraduates, data does not indicate any clear trend.

TABLE XXVI

Praxis I Mathematics Median Scores (PPST and CBT)
Local Median Scores by Academic Major

YEAR	EDUC	ELEM ED	MATH/SCI	SOC SCI	GRAD EDUC.
96-97					
PPST	165 (92)	171 (15)	165 (53)	----------	163 (15)
97-98					
PPST	165 (25)	165 (85)	170 (12)	169 (22)	164 (31)
CBT	315 (23)	314 (21)			315 (13)

No trend data appears with variation from year to year and group to group.

TABLE XXVII

Praxis II Principles of Learning and Teaching (PLT K-6)
National Median Scores Vs Local Median Scores

YEAR	PLT NATIONAL	PLT LOCAL
97-98	Md 171 (N 9712)	Md 153 (N 38)

With only 1 year's scores available, trend data is not possible. Clearly, the Local Median is significantly lower than the National Median. All examinees were Seniors and no data to analyze scores by race, grade level, or academic major is available.

RESULTS: DETAILED ANALYSIS

Earlier in this paper, detailed descriptions of the various sub-tests from each of the Core Battery and Praxis Series Exams was presented. Trend analysis for Core Battery sub-tests from 1993-1997 revealed no significant trends when data was compared by year, major, education level, or academic major. A similar lack of findings was resulted from an analysis of the PPST scores and the CBT scores. Obviously, this analysis was tentative because of the small data sizes.

The lack of differences in the detailed analysis clearly indicates the need to look at scores from a global perspective and that the development of specific instructional strategies to meet distinct sub sets of information is not likely to produce major differences.

SUCCESS RATES:

TABLE XXVII

Rate of Success in Meeting Cut-Off Scores
Local Percentages by Exam over Five Years

YEAR	COM SK	GEN KN		PRO KN	PPST R	PPST W	PPST M
93-94	34%	32%		37%			
94-95	44%	44%		60%			
95-96	45%	40%		59%			
96-97	48%	43%		67%	55%	74%	47%
97-98			PLT	65%	53%	50%	44%

With rare exception, the five year trend shows a consistent pattern of an increased number of students meeting "Safe to Practice" criterion scores. While this increase does not match national sample rates, it is a clear indication that program revision and alterations in instructional materials and strategies can have a positive effect.

SUMMARY OF RESULTS:

- The percentage of students meeting criterion scores did increase over a five year period for our local sample
- Consistent with other findings by researchers looking at diversity variables in successful completion of National Teacher Evaluations, our findings indicate that over a five year period, with two assessment processes, our samples did significantly worse on the available evaluations when compared to national data.
- Variables such as gender, grade level, race, and academic major seemed to have no consistent relationship to success in meeting cut-off scores.
- The data indicated problems with a global, general knowledge base rather than difficulties with specific sub-sets of information.

- Very clearly, the present methods of assessing "Safe to Practice" teachers leads to a decreasing diversity.

DISCUSSION:

Consistently, education majors demonstrate lower predictor scores and lower achievement scores than other disciplines. One effect of this fact is the decrease in the diversity of teachers in our public schools. It may be worth while to consider a version of "affirmative action" incentives for minorities to enter education. Science, math, technology, medicine, and a variety of other areas have met with some success in developing a wider range of minorities.

Of most value would be a serious effort to develop alternative evaluation protocols to assess the potential success and actual success of minorities. Nweke and Noland (1996) for example report that the use of portfolios elicited skills in minorities which were independent of those assessed by traditional standardized exams. They argue that formats similar to the Praxis III may be a better procedure than other paper pencil methods. Early in this paper it was noted that Mississippi, for a number of years, had an observation assessment requirement known as the MATI. Trained observers visited classrooms of first year teachers and recorded activities with a standardized set of criteria. Final certification was dependent on successful completion of this aspect of the licensure process. A like process may well be a better indication of teaching potential than the format of traditional standardized methods.

While certain levels of content knowledge and a knowledge base in teaching-learning strategies, needs, etc. is intuitively necessary for some one to be an effective teacher, it is unclear what level of knowledge is a pre-requisite to being an effective teacher. Clearly, human kind has been taught and has learned an immeasurable body of knowledge by "uncertified" teachers; and most likely by a significant number of illiterate teachers. It is also important to remember one of the basic principles of measurement theory: the closer the assessment mirrors the criterion the better the measurement.

REFERENCES:

Chenoweth, K. "The College Board Decries Preparation Gap". Black Issues in Higher Education, September 17, 1998.

Chenoweth, K. "How did they do that?" Black Issues in Higher Education, October 1, 1998.

Coley, R.J and Goertz, M. E. "Characteristics of Minority NTE Test-Takers." Teacher Programs Council Report No. 91-1. Educational Testing Service, Princeton, NJ, 1990.

DeMauro, G.E. Passing the NTE: A Classification of State Requirrements and Passing Rates, by Ethnicity." Educational Testing Service, 1989.

Educational Testing Service. "Sex, Race, Ethnicity, and Performance on the GRE General Test." 1994, 1995, 1996, 1997, 1998. Educational Testing Service, Princeton, NJ.

Educational Testing Service. "Test at a Glance." Praxis Series, Core Battery, and Principles of Learning and Teaching. Educational Testing Service, Princeton, NJ, 1998.

Fields, C. M. "Poor Test Scores Bar Many Minority Students from Teacher Training." Chronicle of Higher Education, v 35, n10, pA1, 32 Nov 2, 1988.

Gillis, M.K. "Impact of Testing on Minorities Entering Teaching." Teacher Education and Practice, v 6 n 2 pp 23-27 Fall-Winter 1990-91.

Kanengiser, A. "Qualified to Keep Program Certified." Black Issues in Higher Education, September 3, 1998.

National Center for Educational Statistics. "Findings from the Condition of Education 1996: Minorities in Higher Education, 1997.

Nweke, W and Noland, J. "Diversity in Teacher Assessment: What's Working, What's Not?" Paper presented at the Annual Meeting of the American Association of Colleges for Teacher Education, 48th meeting. Chicago, IL, 1996.

Plata, M. "Success of Hispanic College Students on a Writing Examination." The Journal of Educational Issue of Language Minority Students, V. 15, Winter 1995, Boise State University.